

**UTILITY PATENT APPLICATION
TRANSMITTAL UNDER 37 CFR 1.53(b)**

ATTORNEY DOCKET 79910F-P

To: Assistant Commissioner for Patents
Box Patent Application
Washington, D.C. 20231

Express Mail Label No.

EL 267 105 388 US

METHOD OF PROVIDING PHOTOFINISHING
CREDIT

Date:

March 23, 2000



First Named Inventor (or Application Identifier):

Dale F. McIntyre

Enclosed are:

1. ☒ Specification
2. Sheet(s) of drawing(s)
3. ☒ Information Disclosure Statement Under 37 CFR 1.97.
4. Combined Declaration for Patent Application and Power of Attorney:
 - 4a. ☒ New
 - 4b. ☐ Copy from a prior application (37 CFR 1.63(d) (for continuation/divisional with Box 11 completed))
5. ☐ Incorporation by Reference (useable if Box 4b is checked) The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.
6. ☒ Assignment of the invention to **Eastman Kodak Company**
7. ☐ Certified copy of a priority document.
8. ☐ Associate Power of Attorney
9. ☐ Deletion of Inventor(s). Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).

10. ☐ If a 111A application prior to examination of the above-identified application, amend the specification at Page 1, after the title, by inserting the following:
--CROSS REFERENCE TO RELATED APPLICATION
Reference is made to and priority claimed from U.S. Provisional Application Serial No. , filed , entitled .

If a CONTINUING APPLICATION, check appropriate box and supply the requisite information:

11. ☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No: 2
12. ☒ Please address all written communications to Milton S. Sales, Patent Legal Staff, Eastman Kodak Company, 343 State Street, Rochester, NY 14650-2201.
Please Direct all telephone calls to Frank Pincelli at (716) 726-1111.

The filing fee has been calculated as shown below:

FOR:	NO. FILED	NO. EXTRA	RATE	FEE
BASIC FEE				\$ 690
TOTAL CLAIMS	22 - 20 =	2	x 18 =	\$ 36
INDEPENDENT CLAIMS	5 - 3 =	2	x 78 =	\$ 156
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENTED			+ 260	\$0
			TOTAL	\$ 882

- ☒ Please charge my Eastman Kodak Company Deposit Account No. **05-0225** in the amount of \$ 882 .
A duplicate copy of this sheet is enclosed

- ☒ The Assistant Commissioner is hereby authorized to charge any additional filing fees required under 37 CFR 1.16 or credit any overpayment to Eastman Kodak Company Deposit Account No. **05-0225**.
A duplicate copy of this sheet is enclosed.

Frank Pincelli/djs
Telephone: (716) 726-1111
Facsimile: (716) 726-9178

Frank Pincelli
Attorney for Applicants
Registration No. 27,370

ORIGINAL

Application Based on

Docket **79910F-P**

Inventors: Dale F. McIntyre

METHOD OF PROVIDING PHOTOFINISHING CREDIT

Assistant Commissioner for Patents,
ATTN: BOX PATENT APPLICATION
Washington, D. C. 20231

Express Mail Label No.: EL 267 105 388 US

Date: March 23, 2000

METHOD OF PROVIDING PHOTOFINISHING CREDIT

FIELD OF THE INVENTION

This invention is in the field of photographic processing services and, more particularly, is in the field of methods of accumulating credits to a customer's photofinishing loyalty account.

BACKGROUND OF THE INVENTION

It is well known in commerce in general, and in the photofinishing service business in particular as well, to provide incentives to customers to continue use of a particular product or service. These incentives may include, for example, discount coupons or volume discounts. A well-known example of an incentive specific to the photofinishing service business is the practice by some service providers of providing a replacement "free roll of film" to the customer for every roll submitted for processing.

There is another practice, perhaps unique to the photofinishing business, which also serves to create customer satisfaction and loyalty. In a traditional photofinishing service operation, customers are ordinarily assessed a flat rate charge for processing a roll of film (the charge will, however, often depend upon the length of the roll submitted) and then an additional charge for each print made from that roll is added on to the charges for the order. Most photofinishers today can detect if a frame of the film submitted for processing is blank (e.g., the frame either has no exposure on it all, or an overall uniform maximum exposure) and not make a print from blank frames. In some operations, more sophisticated automatic detection means may be applied to detect frames which, while not blank or uniformly fogged, are otherwise unprintable or judged unlikely to make a print the customer would want to have. Thus prints will be made only from those prints judged likely to give good results and the total resulting charges for the photofinishing order then will reflect only the prints actually made. This policy of not making prints from unprintable frames undoubtedly leads to greater customer satisfaction with the photofinishing service received.

A problem not fully addressed by this practice is one which arises from the fact that rolls of film are ordinarily supplied in specific roll lengths, containing fixed numbers of exposures. For example, rolls of 12, 24 or 36 exposures are fairly typical. Often, a user of the film may find there are exposures remaining even though all the photographs desired of a particular event have been made. Confronted by this situation and not wishing to "waste" what is perceived by the user as a valuable resource (in this case unexposed film), the user may resort to a practice of shooting photographs, which may also not be of particular interest at the time. Multiple photographs of the same subject such as a family pet, shot hastily, is a familiar example of this practice. While the customer perhaps realizes she would not have to pay for prints made from blank frames, she nevertheless still views submitting the unexposed frames for processing as wasteful.

More recently cameras have been introduced such as the Kodak Preview™ camera, part of the Advantix™ line of cameras, which while employing film as the capture medium, also captures the image photographed electronically and displays a preview image on an LCD screen on the back of the camera. The photographer is then given a choice to select from the options at photofinishing to order one print from the frame, multiple prints from the frame, or no print at all. In the Kodak Preview™ camera, the instructions to the photofinisher are written to the magnetic recording tracks present on the film. In the instance of a frame where no print is selected, this frame is of course wasted and may not be reused.

With the advent of loyalty accounts and computer-stored databases of customer past purchases and preferences, it is now possible for a photofinishing service provider to set up a photofinishing account for each customer and track total actual usage of photofinishing products and services over time. This capability opens the possibility to provide a method to better address the particular problems described above and thereby to engender even greater satisfaction and loyalty to the provider.

SUMMARY OF THE INVENTION

The present invention provides a solution to the problem outlined above by providing a method of assigning credit for unprintable or unused frames of film to a customer's photofinishing loyalty account. When unexposed or otherwise unprintable frames are submitted for processing, the method allows the photofinisher to keep track of the number of frames submitted but not printed and assigns credit for them to the account. As an example of redeeming such credit, when the number of unprinted frames equals a pre-set criterion, such as the number of frames in a roll, a free roll of film could be issued to the customer. Other forms of credit such as reduction of the photofinishing service charge may also be used.

In practice, the photofinishing service provider sets up a loyalty account for a particular customer and assigns a unique ID number to that account. When the customer submits a new photofinishing order, the ID number is associated with the order for example, either by entry on a photofinishing service request bag, or by swiping a loyalty card programmed with the ID number at a kiosk.

In accordance with one aspect of the present invention there is provided a photoprocessing management system for managing photoprocessing services, comprising:

- a) a computer for processing data with respect to a customer;
- b) means for filling an image order for said customer and associating a charge to said customer for filling of said image order; and
- c) automatically assigning credit on behalf of said customer based on a predetermined criteria.

In accordance with another aspect of the present invention there is provided a method for processing images on an image retaining device, comprising the steps of:

- a. providing an image retaining device of a customer, said image retaining device capable of retaining a predetermined number of images;
- b. processing said image retaining device by a processing lab;

c. automatically determining the number of printable images on said processed image retaining device; and

d. automatically crediting said customer for said unprintable images in accordance with a predetermined criteria.

5 In accordance with yet another aspect of the present invention there is provided a computer software product that when placed in a computer will cause the computer to do the steps of:

a. processing data with respect to a customer;

10 b. keeping track of a customer order having an image retaining device capable of retaining a predetermined number of images;

c. automatically determining the number of printable images on said processed image retaining device; and

d. automatically crediting said customer for said unprintable images in accordance with a predetermined criteria.

15 In accordance with still another aspect of the present invention there is provided a method for processing images on an image retaining device, comprising the steps of:

20 a. scanning an image retaining device of a customer, said image retaining device capable of retaining a predetermined number of images and associating a charge to said customer;

b. automatically determining the number of printable images obtained from said scanning; and

d. automatically crediting said customer for said unprintable images scanned in accordance with a predetermined criteria.

25 In another aspect of the present invention there is provided a method for processing digital images provided by a customer, comprising the steps of:

a. storing a plurality of digital image files provided by a customer and associating charge for said storing to said customer;

b. automatically determining the number of printable images from said stored digital images; and

d. automatically crediting said customer for said unprintable images stored in accordance with a predetermined criteria.

5 The above, and other objects, advantages and novel features of the present invention will become more apparent from the accompanying detailed description thereof when considered in conjunction with the following drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

10 In the detailed description of the preferred embodiments of the invention presented below, reference is made to the accompanying drawings in which:

Fig. 1 is a schematic diagram of a image management system made in accordance with the present invention; and

15 Fig. 2 is a flow chart of operation of the image management system of system of Fig. 1.

DETAILED DESCRIPTION OF THE INVENTION

20 The present description will be directed in particular to elements forming part of, or in cooperation more directly with, the apparatus in accordance with the present invention. It is understood that elements not specifically shown or described may take various forms well known to those skilled in the art.

25 Referring to Fig. 1, there is illustrated a schematic diagram of a system 10 made in accordance with the present invention. The system 10 includes a personal computer 12 having a display device 14 and a keyboard 16 for entering data into computer 12. The display device 14 may be of any particular type. In the particular embodiment illustrated the display device is a CRT. Personal computer 12 is provided with appropriate communication hardware and software so as to enable the personal computer 12 to be connected to an internet service provider (ISP) 18. The ISP 18 provides access to the Internet 20.

30 The system 10 may also include a kiosk 22 or other retail computer located a retailer 23. The kiosk 22 will include a display device 24 and data entry

means 26. In the particular embodiment illustrated, data entry means 26 is a keyboard. It is, of course, understood that the data entry means may be of any appropriate type device, for example, but not by limitation may be a touch display screen or a mouse for controlling a selection icon on the display device 24. In addition a card reader 25 may be provided for reading information from a credit card or loyalty card, for example, information on a magnetic strip provided on the card. Other type reading devices such as a bar-code reader may also be provided for reading of information.

The system 10 further includes a photofinishing lab 30 (photofinishing provider) which provides various photofinishing goods and services. For example, the photofinishing lab 30 typically will receive exposed unprocessed photographic film for processing and printing of photographic prints. The photofinishing lab 30 may provide various other image related products such as photo albums, t-shirts and mugs having personalized images thereon. There is virtually no limit as to the number and different type of image goods or services that may be provided by the photofinishing lab 30.

A typical photofinishing lab 30 will include various different sections. In the particular embodiment illustrated the photofinishing lab 30 includes an order entry station 31. As is typical in such photofinishing labs, the order entry station 31 includes a splice apparatus for splicing together a plurality of individual rolls of film, each one being associated with a single photofinishing order for a particular customer. Between adjacent rolls and connecting the individual rolls there is provided a splice tape which subsequently allows the forming of a single long roll of film that will be processed and printed. The splice tape has a unique machine readable identification number associated with the customer order. Typically this ID number is also printed on the order envelope in which the order was provided. The unique splice number is capable of being tracked through out the photofinishing process and read by various pieces of equipment in the photofinishing process such as a scanner and/or printer. The splice apparatus is also capable of identifying the number of exposures (frames) the roll of film was designed to capture.

The photofinishing lab 30 also included a film processing section 32 wherein exposed undeveloped film is processed. A film scanning section 34 is also provided for scanning the processed film so as to obtain a digital record of the images thereon. The scanning section 34 includes a CCD or other scanning device for electronically capturing the images on the film. Appropriate computer algorithms analyze the digitally captured images to determine which are suitable for printing. The images suitable for printing obtained from the film are forwarded to a computer server 36 or memory storage device 38. A computer 40 is also provided at the photofinishing lab 30 for controlling and monitoring of the photofinishing processes being conducted. The digitally captured images are then sent on to a printer and processing section 42 where the images may be digitally printed and developed. Optionally the images may be forwarded on to an optical printer for optically printing of the images. In such a case, the film may be scanned by a CCD, which is typically used to determine the appropriate printing conditions, to determine what images are suitable for printing. Here again, the CCD can be used to determine the number of images developed on the film that are suitable for printing. The completed order is then packaged at an order packaging station 44 and returned to the retailer 23 that forwarded the order.

In the particular embodiment illustrated, the exposed photographic film is provided to photofinishing lab 30 in a cassette 35 which is placed into an order envelope 37 typically provided at a retailer 23. The order envelope 37 is appropriately filled out by the customer, submitted by the retailer 23, and forwarded by the retailer 23 to the photofinishing lab 30 for obtaining the appropriate service which in the particular embodiment illustrated is for the obtainment of photographic prints. A tear off strip 39 is taken off the order envelope 37 by the customer as a receipt for the order. The tear off strip 39 includes a copy of the envelope ID provided on the envelope that is forwarded to the photofinishing lab 30

The system 10 further includes a network photo service provider 54 wherein digital images obtained from the scanner section 34 at a photofinishing lab 30 may be stored. In a similar fashion, the network photo service provider 54

receives digital images over the internet 20 via personal computer 12 connected to ISP 18.

The network photo service provider 54 includes a server 56 which is used to communicate with the Internet 20. In the embodiment illustrated, the network photo service provider 54 is in communication with photofinishing lab 30 through Internet 20. The internet 20 also allows communication between any of the various parties connected thereto, for example, the customer at home, the retailer 23, the photofinishing lab 30, and network photo service provider 54. A computer 58 is also provided at the network photo service provider 54. Computer 58 is in communication with server 56 and includes an image database 60 which stores digital images, and a customer database 61 for identifying the digital images stored in the image database 60. In the system 10 illustrated, the network photo service provider 54 is shown separate from the photofinishing lab 30. However, the network photo service provider 54 and photofinishing lab 30 may be at a single operation at the same location. In such case, server 56 may be in direct communication with server 36 or may even be the same server.

Referring to Fig. 2, there is illustrated a process flow diagram for the system 10 of the present invention. The first step 62 occurs when a customer fills out an order envelope 37 for ordering a photofinishing service. The customer provides the appropriate information, for example, name, address and e-mail address. In a typical order, the customer would place the item to be processed within the order envelope 37 and placed in a drop box or is handed over to the retailer for forwarding to the photofinishing lab 30 for processing. In the embodiment illustrated the item to be processed is a roll of photographic film contained in a film cartridge 35. However, the item being forward for processing may comprise film negatives, prints, digital memory devices containing digital images, or other items that can be used for obtaining a variety of goods or services.

Optionally, a customer order kiosk 22 may be provided for placing of the customer order. In such case at step 64, a customer loyalty card may be

swiped into card reader 25 on the kiosk 22 for identifying the customer with the order envelope being used. The customer can provide all of the order information into the kiosk 22. At step 66, the roll ID may be scanned for identifying source of image. When the customer finishes entry of the order a label is printed for
5 placement on the enveloped and is placed on the order envelope by the customer at step 68. Such a kiosk 22 is described in two co-pending applications entitled Method and Apparatus for Ordering Photofinishing Goods and/or services filed on January 27, 2000, attorney docket 79988 by Neil A Ramquist et al., and Method and Apparatus for Ordering Photofinishing Goods and/or services filed on January
10 27, 2000, attorney docket 79961 by Frank Nardozzi et al.

The completed order envelope 37 with the item to be processed enclosed at step 70 is forwarded on to the photofinishing lab 30. During initial processing, the photofinishing lab 30 enters the appropriate information at order station 31 regarding the order received into computer 40, for example, name,
15 address, e-mail address, customer ID, order envelope, etc. Additionally other order information can be automatically obtained from information on the film and/or film cartridge such as the type of film that is to be developed and the number of images the roll of film was designed to capture. The information regarding the film type may used for enhancing the captured image at a later stage
20 in the processing. The number of images that the roll of film was designed to capture will be used as later described herein. Appropriate information is then sent from the photofinishing lab 30 to the network photo service provider 54 such as the customer identification data. The network photo service provider 54 takes the information received from the photofinishing lab 30 and stores the digital
25 images in the image database 60 and customer information in the customer database 61. The order is processed by the photofinishing lab 30 at step 72. For example, if a roll of photographic film is being sent for processing, the film is processed as is customarily done and in accordance with the customer order instructions. In the photofinishing lab 30 after the images on the film have been
30 developed, they are digitally scanned, for example by a CCD linear array, whereby

the images developed thereon can be captured. In addition to capturing the images, the images can be analyzed by appropriate algorithms for obtaining various information. In the particular embodiment illustrated the photofinishing lab 30 at step 74 analyzes the images to determine which images are suitable for printing. If there are no unprintable images, the film is sent on to the printer where the images are printed and returned to the customer at step 76. In the particular embodiment illustrated the images on the film are analyzed to determine if sufficient light is present in the image so as to produce a reasonable quality print. It is to be understood the images can analyzed for any desired predetermined criteria. In determining if an image is suitable for printing various appropriate algorithms may be used. For example, US patent 4,239,384 by H. Treiber, published 12/16, 1980 and herein incorporated by reference, discloses a method useful in a scanning printer to automatically detect and reject from printing frames unprintable by virtue of under- or over-exposure. Also, commonly assigned US patent 4,651,199 by J. Alkofer discloses a method to detect and reject from printing blank frames, either of the "no exposure" or "maximum exposure" type. Both of these patents are hereby incorporated by reference. Additionally, appropriate algorithms may be provided for adjusting the image so that the images forwarded to the customer are illustrated in their best possible form. Once the number of unprintable frames for the roll of film being developed is determined, the number of unprintable frames is credited to the customer's account at step 78. For example, this information is passed on to the customer database 61. The total number of unprintable images that result from a particular customer is kept track of at database 61. This crediting of the customer account is updated for each roll of film forwarded to the photofinishing lab 30 over time. When the number of credited unprintable frames reaches a predetermined criteria, a token is provided for that customer. For example, at step 80 when the number of unprintable frames reaches the number of frames on a roll of film that would hold 24 images, a complimentary roll of film or equivalent coupon would authorized for sending to the customer by the network photo

5

10

25

PARTS LIST

10.	system	64.	step
12.	personal computer	68.	step
14.	display device	70.	step
16.	keyboard	71.	step
18.	Internet Service Provider (IPS)	74.	step
20.	Internet	76.	step
22.	kiosk	78.	step
23.	retailer	82.	step
24.	display device	84.	step
25.	card reader		
26.	data entry means		
30.	photofinishing lab		
31.	order entry station		
32.	film processing section		
34.	film scanning section		
35.	cassette		
36.	computer server		
37.	order envelope		
38.	memory storage device		
39.	tear off strip		
40.	computer		
42.	processing section		
44.	order packaging station		
54.	network photo service provider		
56.	server		
58.	computer		
60.	image database		
61.	customer database		
62.	step		

WHAT IS CLAIMED IS:

1. A photoprocessing management system for managing photoprocessing services, comprising:
 - a. a computer for processing data with respect to a customer;
 - b. means for filling an image order for said customer and associating a charge to said customer for filling of said image order; and
 - c. automatically assigning credit on behalf of said customer based on a predetermined criteria.
2. A photoprocessing management system according to claim 1 wherein said automatically assigned credit on behalf of said customer is updated by said computer for each of a plurality of said image orders.
3. A photoprocessing management system according to claim 1 wherein said image order comprises printing of images on a roll of photographic film.
4. A photoprocessing management system according to claim 1 wherein said image order comprises scanning of hard copy images .
5. A photoprocessing management system according to claim 4 wherein said hard copy images are provided on photographic film.
6. A photoprocessing management system according to claim 5 wherein said photographic film comprises a roll of film.
7. A photoprocessing management system according to claim 1 wherein said image order comprises the storage of images in a memory storage device.

[illegible][illegible][illegible][illegible][illegible][illegible][illegible]

- [illegible]

21. A method for processing images on an image retaining device, comprising the steps of:
 - a. scanning an image retaining device of a customer, said image retaining device capable of retaining a predetermined number of images and associating a charge to said customer;
 - b. automatically determining the number of printable images obtained from said scanning; and
 - c. automatically crediting said customer for said unprintable images scanned in accordance with a predetermined criteria.
22. A method for processing digital images provided by a customer, comprising the steps of:
 - a. storing a plurality of digital image files provided by a customer and associating charge for said storing to said customer;
 - b. automatically determining the number of printable images from said stored digital images; and
 - c. automatically crediting said customer for said unprintable images stored in accordance with a predetermined criteria.

A management system and method of assigning credit for unprintable images provided by a customer. When unprintable frames are submitted for processing, such as scanning, printing or storage, the method allows the photofinisher to keep track of the number of image submitted for processing and assigns credit for to the customer's account for unprintable images. As an example of redeeming such credit, when the number of unprintable images equals a pre-set criterion, such as the number of frames in a roll, a free roll of film could be issued to the customer.

Fig. 1

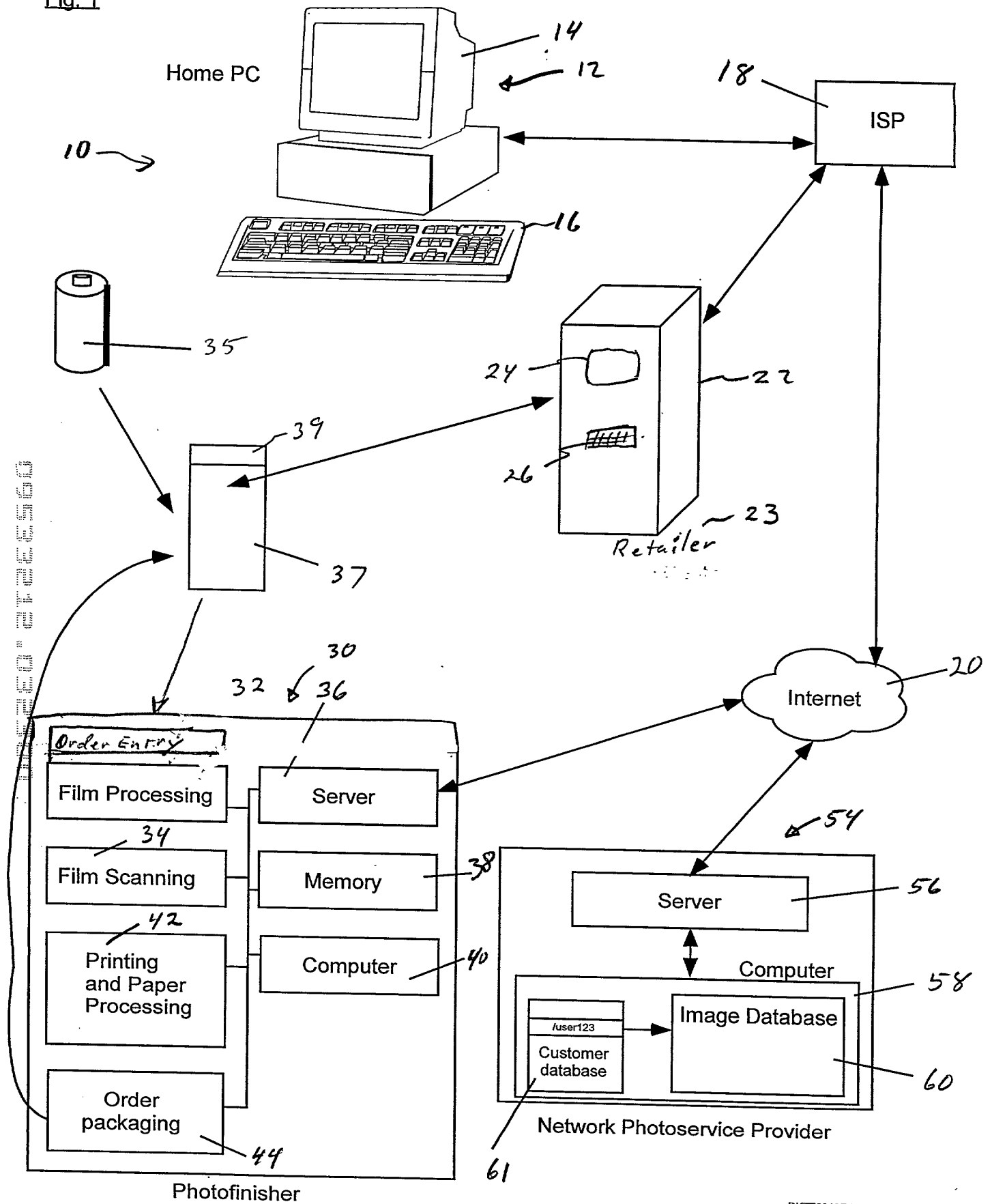
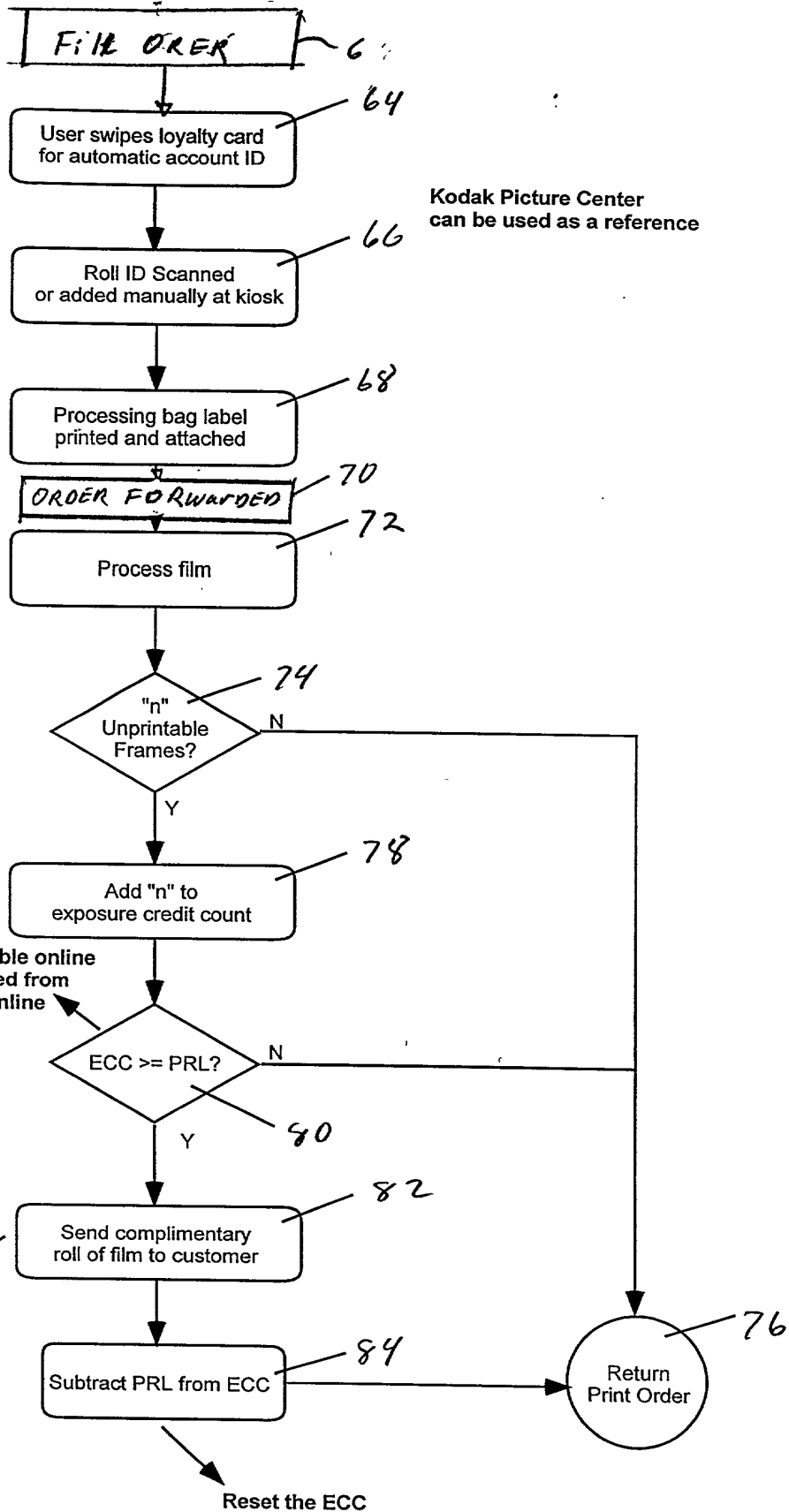


Fig. 2



Combined Declaration For Patent Application and Power of Attorney

ATTORNEY DOCKET
79910F-P

As below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

METHOD OF PROVIDING PHOTOFINISHING CREDIT

The specification of which (check only one item below):

☒ is attached hereto.☐ was filed as United States Application Serial No. on and
was amended on (if applicable).☐ was filed as PCT international application Number on and was amended under PCT Article 19 on (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the U.S. Patent & Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign applications(s) for patent or inventor's certificate or any PCT international application(s) designating a least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed:

PRIOR FOREIGN/PCT APPLICATION(S) AND ANY PRIORITY CLAIMS UNDER 35 U.S.C. 119:

COUNTRY (if PCT, indicate PCT)	APPLICATION NUMBER	DATE OF FILING (day month year)	PRIORITY CLAIMED UNDER 35 USC §119			
			<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
			<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
			<input type="checkbox"/>	YES	<input type="checkbox"/>	NO

I hereby claim the benefit under Title 35, United States Code, 119 §(e) of any United States provisional application(s) listed below:

PRIOR PROVISIONAL APPLICATION(S) AND ANY PRIORITY CLAIMS UNDER 35 U.S.C. §119 (e):

PROVISIONAL APPLICATION NUMBER	FILING DATE

I hereby claim the benefit under Title 35, United States Code, §120 of any prior United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior applications(s) in the manner provided by the first paragraph of Title 35, §112, I acknowledge the duty to disclose to the U.S. Patent & Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations §1.56, which became available between the filing date of the prior application(s) and the national or PCT international filing date of this application:

PRIOR US APPLICATIONS OR PCT INTERNATIONAL APPLICATIONS DESIGNATING THE U.S FOR BENEFIT UNDER 35USC§120:

U.S. APPLICATIONS			STATUS (Check one)		
U.S. APPLICATION NUMBER	U.S. FILING DATE		PATENTED	PENDING	ABANDONED
PCT APPLICATIONS DESIGNATING THE U.S.					
PCT APPLICATION NO.	PCT FILING DATE	U.S. SERIAL NUMBERS ASSIGNED (if any)			

Combined Declaration For Patent Application and Power of Attorney (Continued)

ATTORNEY DOCKET
79910F-P

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith (*List name and registration number*)

Frank Pincelli, Registration No. 27,370
Thomas H. Close, Registration No. 27,428
J. Lanny Tucker, Registration No. 27,678
Sarah Meeks Roberts, Registration No. 33,447
Milton S. Sales, Registration No. 24,516

Send Correspondence to:

Milton S. Sales
 Eastman Kodak Company
 Patent Legal Staff
 Rochester, NY 14650-2201

Direct Telephone Calls to:
(name and telephone number)

Frank Pincelli
 (716) 726-1111
 FAX: (716) 726-9178

2	FULL NAME OF INVENTOR	FAMILY NAME	FIRST GIVEN NAME	SECOND GIVEN NAME
0	RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP
1	BUSINESS ADDRESS	BUSINESS ADDRESS	CITY	STATE & ZIP CODE (COUNTRY)
2	FULL NAME OF INVENTOR	FAMILY NAME	FIRST GIVEN NAME	SECOND GIVEN NAME
0	RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP
2	BUSINESS ADDRESS	BUSINESS ADDRESS	CITY	STATE & ZIP CODE (COUNTRY)
2	FULL NAME OF INVENTOR	FAMILY NAME	FIRST GIVEN NAME	SECOND GIVEN NAME
0	RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP
3	BUSINESS ADDRESS	BUSINESS ADDRESS	CITY	STATE & ZIP CODE (COUNTRY)
2	FULL NAME OF INVENTOR	FAMILY NAME	FIRST GIVEN NAME	SECOND GIVEN NAME
0	RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP
4	BUSINESS ADDRESS	BUSINESS ADDRESS	CITY	STATE & ZIP CODE (COUNTRY)
2	FULL NAME OF INVENTOR	FAMILY NAME	FIRST GIVEN NAME	SECOND GIVEN NAME
0	RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP
5	BUSINESS ADDRESS	BUSINESS ADDRESS	CITY	STATE & ZIP CODE (COUNTRY)
2	FULL NAME OF INVENTOR	FAMILY NAME	FIRST GIVEN NAME	SECOND GIVEN NAME
0	RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP
6	BUSINESS ADDRESS	BUSINESS ADDRESS	CITY	STATE & ZIP CODE (COUNTRY)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

SIGNATURE OF INVENTOR 201	SIGNATURE OF INVENTOR 202	SIGNATURE OF INVENTOR 203
DATE	DATE	DATE
SIGNATURE OF INVENTOR 204	SIGNATURE OF INVENTOR 205	SIGNATURE OF INVENTOR 206
DATE	DATE	DATE